Surveying the provision of research integrity training in in Japan, India, the UK, the USA, and Australia

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Research Integrity Training — we weren't sure where we were starting from
So we sought to find out how and what researchers learn about research integrity

In 2019, *Nature* hosted a meeting of stakeholders from all parts of the Australian research community — including representatives from business, government bodies, university and research institutes, and funding organisations — to discuss research integrity and good research practices.

The aim was to drive the conversation about how to improve the way research is conducted, reported, and rewarded. One of the most striking outcomes of this meeting was the realization of how little anyone knew about the level of understanding or training offered to researchers in research integrity.

So, we (initially) partnered with the Australian Academy of Sciences to conduct a survey to find out.

Australian researchers call for mandatory research integrity training

R Research Publishing
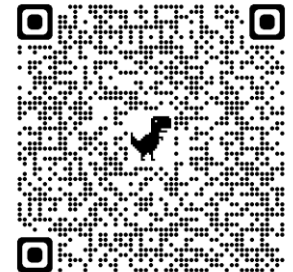By: Ed Gerstner, Gregory Goodey, Chris Graf and David Swinbanks, Wed Jun 8 2022

In 2019, *Nature* hosted a meeting of stakeholders from all parts of the Australian research community — including early- and mid-career researchers, university leaders, and funders — to discuss research integrity and good research practices. Acting on a key recommendation from that meeting, we partnered with the Australian Academy of Science to conduct a survey of researchers at all levels of seniority, from PhD students to Vice-Chancellors, at a total of 34 universities, 26 medical, biomedical and health research institutes, 10 corporates and 3 government institutes including CSIRO, to gauge the level of their understanding of research integrity, t... institutions provide, and to find out w...

The results of the survey released ea... but also left some big questions and... explore below. Over two-thirds of tho... institutions offered training in resear... more likely to report the existence of... mid-career researchers (66%). Moreo... research integrity training was mand... that it should be mandatory for all re...

Good versus bad
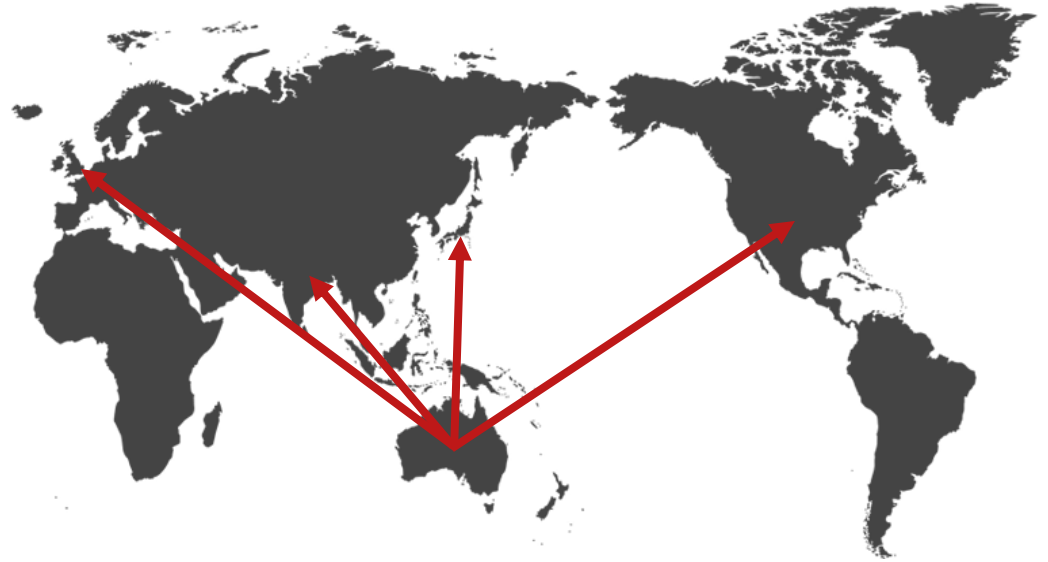
Although research integrity, or rather...

Since then we've extended the survey to the UK, the USA, India & Japan

In partnership with

Australian Academy of Science

THE NATIONAL ACADEMY OF SCIENCES
ESTD 1930
INDIA

JAAS
Japanese Association for the Advancement of Science

INYAS
Indian National Young Academy of Science

... and others.

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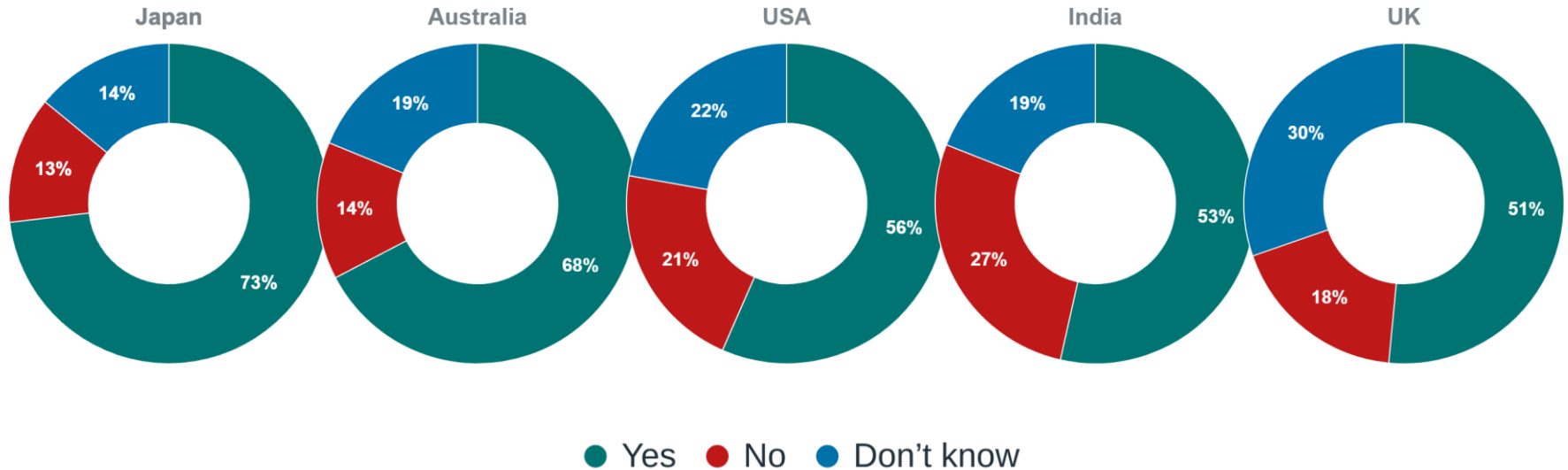
Who has access to training in research integrity?

Japanese and Australian researchers were more likely to report they had training than those elsewhere
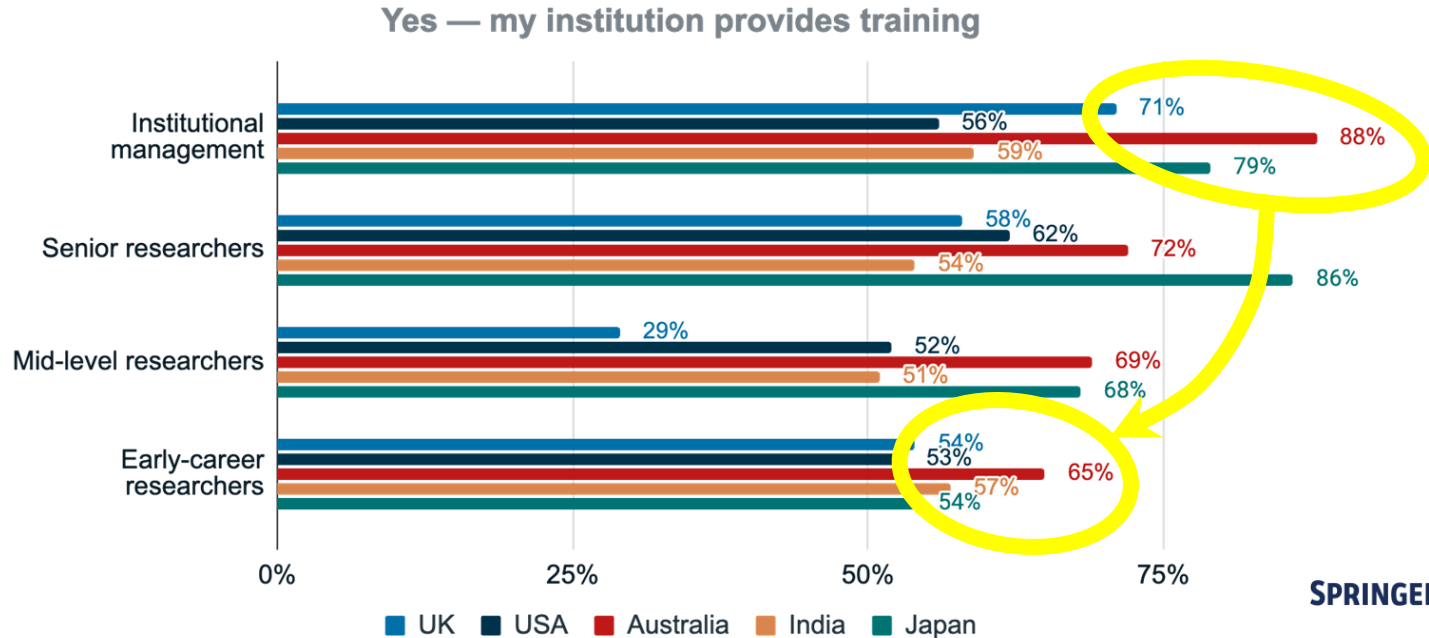
A substantially higher proportion of participants from Australia (68%) and Japan (73%) reported that they had access to Research Integrity Training than those in the USA (56%), India (53%), or the UK (51%).

Japan — Yes 73%, No 13%, Don't know 14%
Australia — Yes 68%, No 14%, Don't know 19%
USA — Yes 56%, No 21%, Don't know 22%
India — Yes 53%, No 27%, Don't know 19%
UK — Yes 51%, No 18%, Don't know 30%

● Yes ● No ● Don't know

Who has access to training in research integrity?

Institutional leaders more likely to report training exists than early career researchers
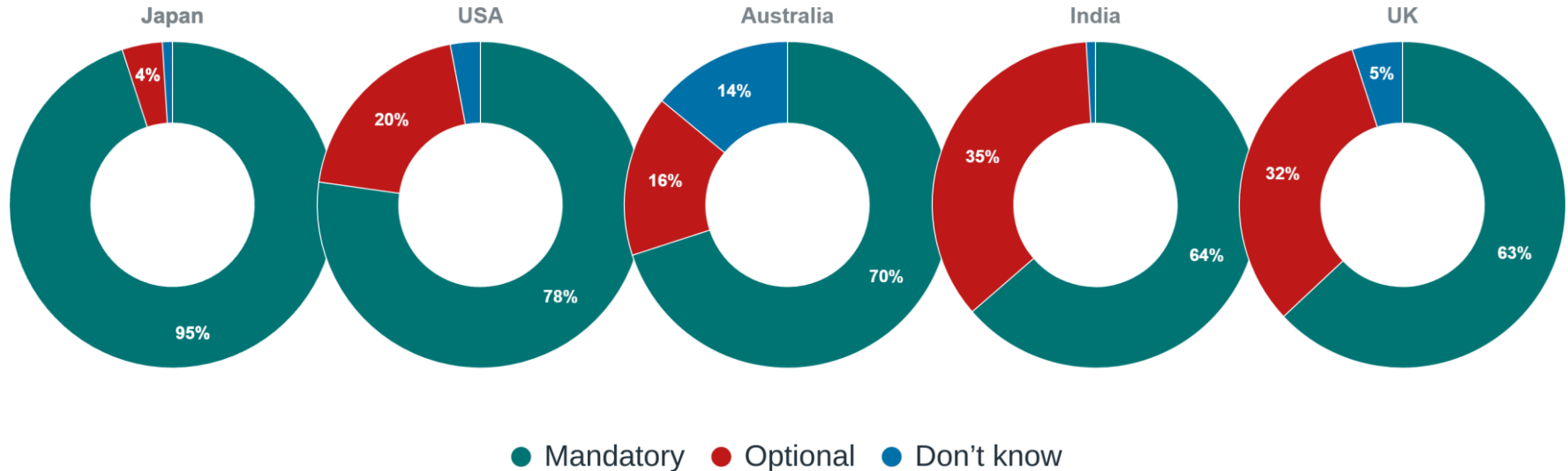
Institutional leaders and senior researchers were more likely to assert that their institutions provided training in research integrity than early- and mid-career researchers. The differences were most stark in the UK, Australia, and Japan.

Yes — my institution provides training

Institutional management:
- UK: 71%
- USA: 56%
- Australia: 88%
- India: 59%
- Japan: 79%

Senior researchers:
- UK: 58%
- USA: 62%
- Australia: 72%
- India: 54%
- Japan: 86%

Mid-level researchers:
- UK: 29%
- USA: 52%
- Australia: 69%
- India: 51%
- Japan: 68%

Early-career researchers:
- UK: 54%
- USA: 53%
- Australia: 65%
- India: 57%
- Japan: 54%

Legend: UK, USA, Australia, India, Japan

Is research integrity training mandatory?

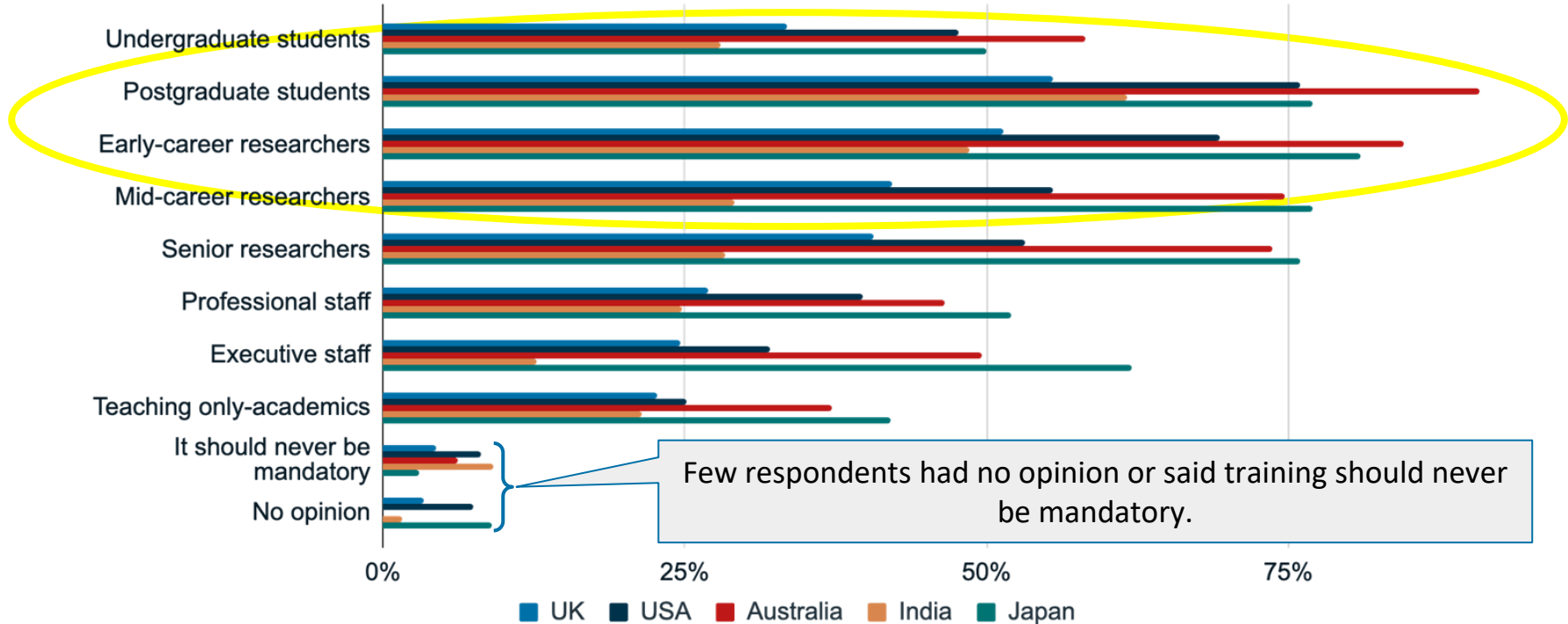## Majority of respondents reported that if training is available, it is mandatory

For those who had access to training, respondents from Japan (95%) were most likely to report that it was mandatory, those from the UK (63%) and India (64%) were least likely, and those from Australia (70%) and the USA (78%), in between.

Japan
- 95% Mandatory
- 4% Optional

USA
- 78% Mandatory
- 20% Optional

Australia
- 70% Mandatory
- 16% Optional
- 14% Don't know

India
- 64% Mandatory
- 35% Optional

UK
- 63% Mandatory
- 32% Optional
- 5% Don't know

● Mandatory ● Optional ● Don't know

SHOULD research integrity training be mandatory?

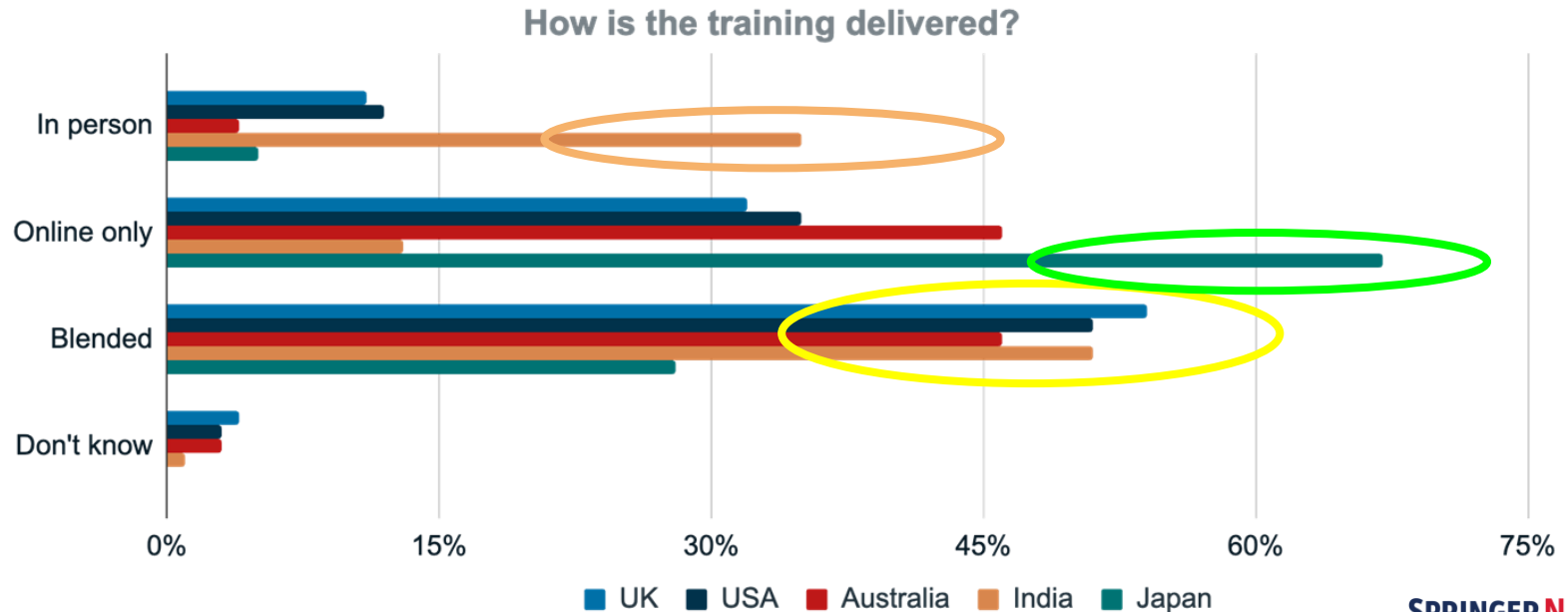## Most felt training should be mandatory for postgrads and early career researchers

For whom SHOULD research integrity training be mandatory?

Few respondents had no opinion or said training should never be mandatory.

UK USA Australia India Japan

How is training delivered?

In the UK, the USA, Australia, and India, a blended combination of online and in-person delivery of training is most common. In Japan, online-only is the most common. In India, the next most common is delivery in person.
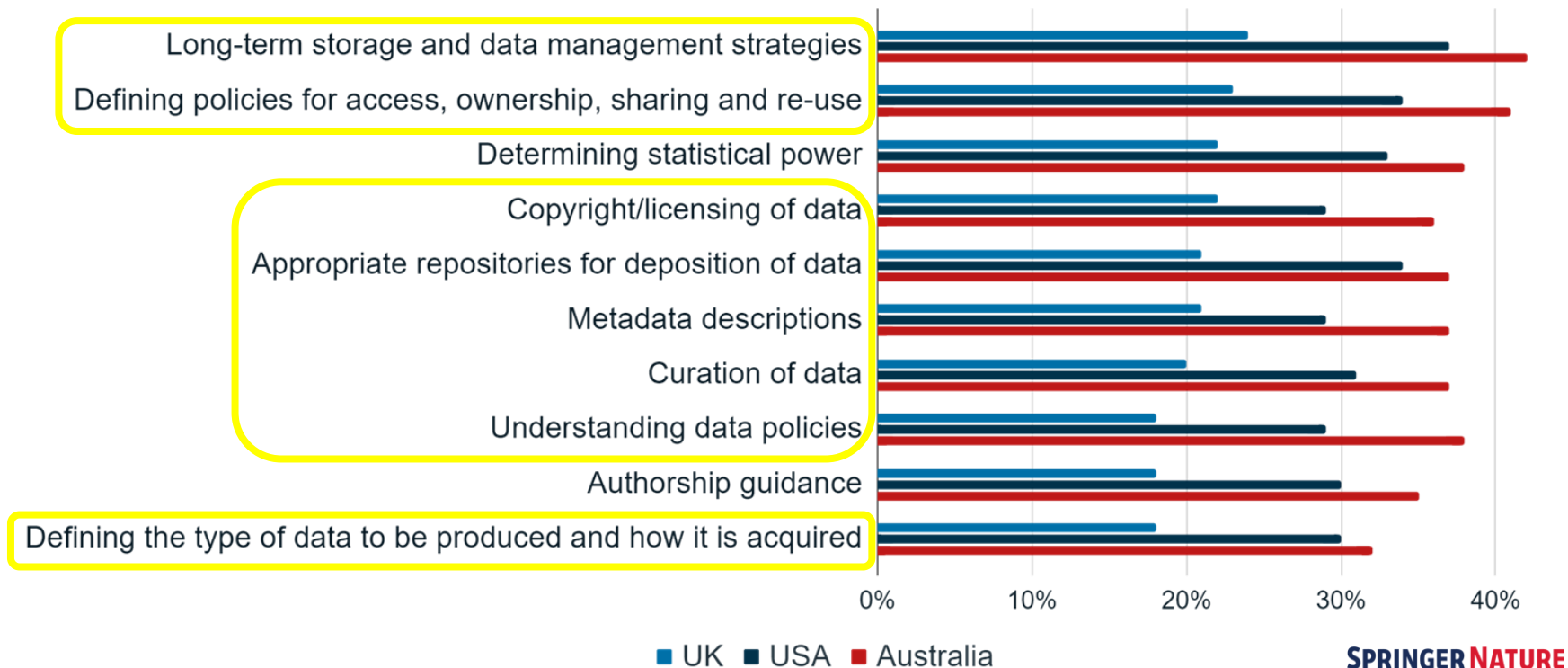

How is the training delivered?

What's missing? — More data training wanted

In UK, USA, and Australia, 8 of the top 10 most desired topics for further training are related to data
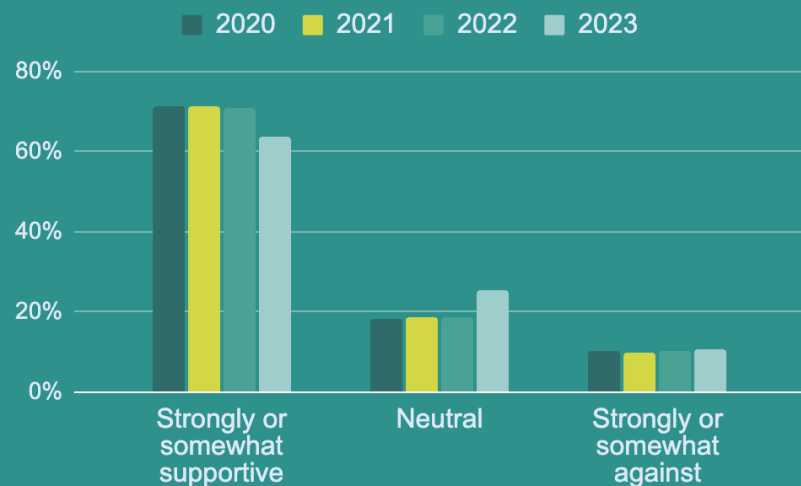

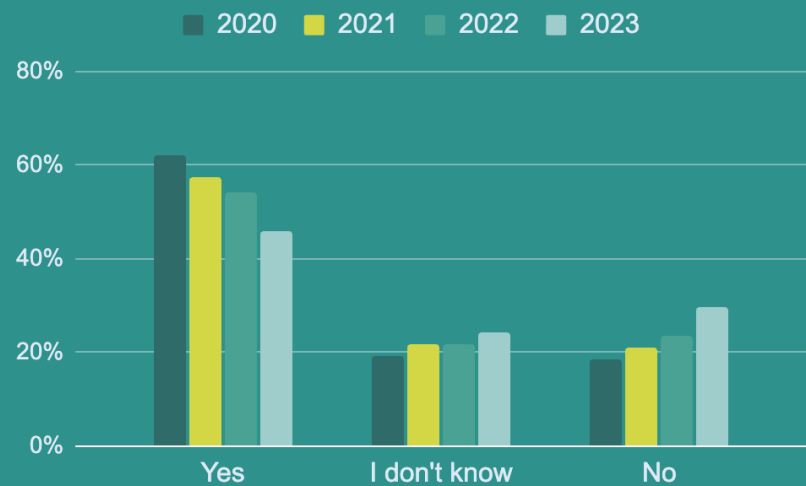Top ten topics where more training is desired

Long-term storage and data management strategies
Defining policies for access, ownership, sharing and re-use
Determining statistical power
Copyright/licensing of data
Appropriate repositories for deposition of data
Metadata descriptions
Curation of data
Understanding data policies
Authorship guidance
Defining the type of data to be produced and how it is acquired

0%   10%   20%   30%   40%

■ UK ■ USA ■ Australia

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Support among researchers for national mandates is falling

State of Open Data survey found a drop in support for open data mandates over last four years globally

How supportive would you be of a national mandate for making research data openly available?

Legend: 2020, 2021, 2022, 2023

Should funders penalise researchers who do not comply with a data sharing mandate?

Legend: 2020, 2021, 2022, 2023

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Thank you

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Scan QR code for the reports and raw data from all surveys

Thank you to our partners

JAAS — Japanese Association for the Advancement of Science

Australian Academy of Science

THE NATIONAL ACADEMY OF SCIENCES — INDIA

INYAS — Indian National Young Academy of Science

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